



PTO/SB/08A (10-01)

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Institute for form 1448A/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Application Number	09/943,199
				Filing Date	August 29, 2001
				First Named Inventor	Kristy A. Campbell
				Art Unit	2818
				Examiner Name	D. Vu
Sheet	1	of	5	Attorney Docket Number	M4065.0704/P704

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
DV	AA	2002/0000866	1/3/2002	Kozicki et al.	
	AB	2002/0072188	6/13/2002	Gilton	
	AC	2002/0108849	08/08/2002	Moore	
	AD	2002/0123189	09/05/2002	Moore et al.	
	AE	2002/0123170	09/05/2002	Moore et al.	
	AF	2002/0123248	09/05/2002	Moore et al.	
	AG	2002/0127886	09/12/2002	Moore et al.	
	AH	2002/0132417	09/09/2002	Li	
	AI	2002/0160551	10/31/2002	Harshfield	
	AJ	2002/0163828	11/07/2002	Krieger et al.	
	AK	2002/0168820	11/2002	Kozicki	
	AL	2002/0168852	11/2002	Kozicki	
	AM	2002/0190289	12/19/2002	Harshfield et al.	
	AN	2002/0190350	12/19/2002	Kozicki et al.	
	AO	2003/0001229	01/02/2003	Moore et al.	
	AP	2003/0027416	02/06/2003	Moore	
	AQ	2003/0032254	02/13/2003	Gilton	
	AR	2003/0035314	02/20/2003	Kozicki	
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	AV	2003/0045048	3/2003	Campbell et al.	
DV	AW	2003/0045054	3/2003	Campbell et al.	
	AX	2003/0047765	03/13/2003	Campbell	
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	AZ	2003/0047773	03/13/2003	Li	
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	AD1	2003/0068861	4/2003	Li et al.	
	AE1	2003/0068862	4/2003	Li et al.	
	AF1	2003/0095426	05/22/2003	Hush et al.	
	AG1	2003/0098497	5/2003	Moore et al.	
	AH1	2003/0107105	6/2003	Kozicki	
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	AJ1	2003/0128612	07/10/2003	Moore et al.	
	AK1	2003/0137869	07/24/2003	Kozicki	
	AL1	2003/0143782	07/31/2003	Gilton et al.	
	AM1	2003/0155589	08/21/2003	Campbell et al.	
	AN1	2003/0155608	08/21/2003	Campbell et al.	
	AO1	2003/0158447	08/21/2003	Kozicki	
	AP1	2003/0158463	08/21/2003	Casper et al.	
DV	AQ1	2003/0209728	11/13/2003	Kozicki et al.	



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**INFORMATION DISCLOSURE  
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Examiner Name	D. Vu
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PV	AR1	2003/0209971	11/13/2003	Kozicki et al.	
	AS1	2003/0210564	11/13/2003	Kozicki et al.	
	AT1	2003/0212724	11/2003	Ovshinsky et al.	
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	AV1	2004/0035401	2/2004	Ramachandran et al.	
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	AR2	4,710,899	12/1987	Young et al.	
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	AZ2	4,809,044	2/1989	Pryor et al.	
	AA3	4,818,717	4/1989	Johnson et al.	
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	AC3	4,845,533	7/1989	Pryor et al.	
	AD3	4,853,785	8/1989	Ovshinsky et al.	
	AE3	4,891,330	1/1990	Guha et al.	
	AF3	5,128,099	7/1992	Strand et al.	
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	AJ3	5,298,716	3/1994	Ovshinsky et al.	
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Y	AM3	5,341,328	8/1994	Ovshinsky et al.	
PV	AN3	5,359,205	10/1994	Ovshinsky	

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**INFORMATION DISCLOSURE  
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Application Number	09/943,199
Filing Date	August 29, 2001
First Named Inventor	Kristy A. Campbell
Art Unit	2818
Examiner Name	D. Vu
Attorney Docket Number	M4065.0704/P704

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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## Complete If Known

Application Number 09/943,189  
Filing Date August 29, 2001  
First Named Inventor Kristy A. Campbell  
Art Unit 2818  
Examiner Name D. Vu  
Attorney Docket Number M4065.0704/P704

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✓	AL5	6,576,921	6/2003	Lowery	
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	AO5	6,590,807	7/2003	Lowery	
	AP5	6,593,178	7/2003	Dennison	
	AQ5	6,597,009	7/2003	Wicker	
	AR5	6,605,527	8/2003	Dennison et al.	
	AS5	6,613,604	9/2003	Maimon et al.	
	AT5	6,621,095	9/2003	Chiang et al.	
	AU5	6,625,054	9/2003	Lowery et al.	
	AV5	6,642,102	11/2003	Xu	
	AW5	6,646,297	11/2003	Dennison	
	AX5	6,649,928	11/2003	Dennison	
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	AA6	6,673,648	1/2004	Lowrey	
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	AF6	6,690,026	2/2004	Peterson	
	AG6	6,696,355	2/2004	Dennison	
	AH6	6,707,712	3/2004	Lowery	
✓	AI6	6,714,954	3/2004	Ovshinsky et al.	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
		Country Code <sup>2</sup> -Number <sup>3</sup> -Kind Code <sup>4</sup> (if known)				
	BA	56126916	10/19981	Akira et al.		
	BB	WO 97/48032	12/18/1997	Kozicki et al.		
	BC	WO 99/28914	08/16/1999	Kozicki et al.		
	BD	WO 00/48186	08/17/2000	Kozicki et al.		
	BE	WO 02/21542	03/14/2002	Kozicki et al.		

Examiner Signature	<i>Shudor</i>	Date Considered	12/08/04
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See attached Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

The PTO did not receive the following listed Items(s) FOR - FROM - BA to BE



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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 5 of 5

### Complete if Known

Application Number	09/943,199
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First Named Inventor	Kristy A. Campbell
Group Art Unit	2818
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Attorney Docket Number	M4065.0704/P704

### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
DV	CA	Kawamoto, Y., Nishida, M., Ionic Condition in As <sub>2</sub> S <sub>3</sub> -Ag <sub>2</sub> S, GeS <sub>2</sub> -GeS-Ag <sub>2</sub> S and P <sub>2</sub> S <sub>5</sub> -Ag <sub>2</sub> S Glasses, J. Non-Cryst Solids 20(1976) 393-404.	
	CB	Kozicki et al., Silver incorporation in thin films of selenium rich Ge-Se glasses, International Congress on Glass, Volume 2, Extended Abstracts, July 2001, pgs. 8-9.	
	CC	Michael N. Kozicki, 1. Programmable Metallization Cell Technology Description, February 18, 2000	
	CD	Michael N. Kozicki, Axon Technologies Corp. and Arizona State University, Presentation to Micron Technology, Inc., April 6, 2000	
	CE	Kozicki et al., Applications of Programmable Resistance Changes in Metal-Doped Chalcogenides, Electrochemical Society Proceedings, Volume 99-13, 1999, pgs. 298-309.	
	CF	Kozicki et al., Nanoscale effects in devices based on chalcogenide solid solutions, Superlattices and Microstructures, Vol. 27, No. 516, 2000, pgs. 485-488.	
	CG	Kozicki et al., Nanoscale phase separation in Ag-Ge-Se glasses, Microelectronic Engineering 63 (2002) pgs 155-159.	
	CH	Mitkova, M.; Wang, Y.; Boolchand, P., Dual chemical role of Ag as an additive in chalcogenide glasses, Phys. Rev. Lett. 83 (1999) 3848-3851.	
DV	CI	Miyatani, S.-y., Electrical properties of Ag <sub>2</sub> Se, J. Phys. Soc. Japan 13 (1958) 317.	

Examiner Signature	<i>Phuland</i>	Date Considered	12/08/04
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/PTO			<b>Complete if Known</b>		
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			Art Unit	2818	
			Examiner Name	David Vu	
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		Number-Kind Code <sup>2</sup> (if known)			
DV	AE	6,388,324	05/14/2002	Kozicki et al.	
	AF	US 2002/0000666	01/03/2002	Kozicki et al.	
	AG	5,500,532	03/19/1998	Kozicki et al.	
	AH	6,614,049	07/09/2002	Kozicki et al.	
DV	AI	5,751,012	05/12/1998	Welstenholme et al.	

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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>2</sup> -Number <sup>2</sup> -Kind Code <sup>2</sup> (if known)				
DV	BA	WO 97/488032	12/18/1997	Kozicki et al.		
DV	BB	WO 99/28914	06/10/1999	Kozicki et al.		

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First Named Inventor	
Group Art Unit	
Examiner Name	
Attorney Docket Number	

Sheet 2 of 8

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
DV	CA	Abdel-Ali, A.; Elshafie, A.; Elhawary, M.M., DC electric-field effect in bulk and thin-film Ge <sub>5</sub> As <sub>38</sub> Te <sub>57</sub> chalcogenide glass, Vacuum 59 (2000) 845-853.	
	CB	Adler, D.; Moss, S.C., Amorphous memories and bistable switches, J. Vac. Sci. Technol. 9 (1972) 1182-1189.	
	CC	Adler, D.; Henisch, H.K.; Mott, S.N., The mechanism of threshold switching in amorphous alloys, Rev. Mod. Phys. 50 (1978) 209-220.	
	CD	Afifi, M.A.; Labib, H.H.; El-Fazary, M.H.; Fadel, M., Electrical and thermal properties of chalcogenide glass system Se <sub>75</sub> Ge <sub>25</sub> -xSb <sub>x</sub> , Appl. Phys. A 55 (1992) 167-169.	
	CE	Afifi, M.A.; Labib, H.H.; Fouad, S.S.; El-Shazly, A.A., Electrical & thermal conductivity of the amorphous semiconductor GexSe <sub>1-x</sub> , Egypt. J. Phys. 17 (1986) 335-342.	
	CF	Alekperova, Sh.M.; Gadzhieva, G.S., Current-Voltage characteristics of Ag <sub>2</sub> Se single crystal near the phase transition, Inorganic Materials 23 (1987) 137-139.	
	CG	Aleksiejunas, A.; Cesnys, A., Switching phenomenon and memory effect in thin-film heterojunction of polycrystalline selenium-silver selenide, Phys. Stat. Sol. (a) 19 (1973) K169-K171.	
	CH	Angell, C.A., Mobile ions in amorphous solids, Annu. Rev. Phys. Chem. 43 (1992) 693-717.	
	CI	Aniya, M., Average electronegativity, medium-range-order, and ionic conductivity in superionic glasses, Solid state Ionics 136-137 (2000) 1085-1089.	
	CJ	Asahara, Y.; Izumitani, T., Voltage controlled switching in Cu-As-Se compositions, J. Non-Cryst. Solids 11 (1972) 97-104.	
	CK	Asokan, S.; Prasad, M.V.N.; Parthasarathy, G.; Gopal, E.S.R., Mechanical and chemical thresholds in IV-VI chalcogenide glasses, Phys. Rev. Lett. 62 (1989) 808-810.	
	CL	Baranovskii, S.D.; Cordes, H., On the conduction mechanism in ionic glasses, J. Chem. Phys. 111 (1999) 7546-7557.	
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CV	CN5	Thornburg, D.D., Memory switching in a Type I amorphous chalcogenide, J. Elect. Mat. 2 (1973) 3-15.	
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Examiner Signature	<i>Shubert</i>	Date Considered	12/08/04
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